Please amend the application as follows:

In the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (cancelled)

2. (previously presented) An assay for detecting peptidoglycan synthesis, which comprises the steps of:

(1) incubating a reaction mixture comprising in aqueous medium a uridine(5'-)diphosphate (UDP)-*N*-acetylmuramylpentapeptide, radiolabelled UDP-*N*-acetyl glucosamine, divalent metal ions, undecaprenyl phosphate, peptidoglycan, translocase enzyme, transferase enzyme, transglycosylase enzyme, transpeptidase enzyme and lipid pyrophosphorylase enzyme, under conditions suitable for peptidoglycan synthesis;

(2) adding a divalent metal ion chelator compound to the reaction mixture of step (1) to terminate peptidoglycan synthesis;

(3) adding lectin-coated beads impregnated with a fluorescer to the reaction mixture of step (2), which beads bind, via the lectin coating, the radiolabelled UDP-*N*-acetyl glucosamine in the peptidoglycan synthesized in step (1); and

(4) measuring light energy emitted by the fluorescer as a result of activation of the fluorescer by the radiation energy emitted by the radiolabelled peptidoglycan proximately bound thereto, which light energy is indicative of the presence of radiolabelled peptidoglycan synthesized in step (1).

3. (previously presented) The assay according to claim 2, wherein the UDP-*N*-acetylmuramylpentapeptide is UDP-Mur*N*Ac-L-alanine-γ-D-glutamic acid-m-diaminopimelic acid-D-alanine-D-alanine.

4. (previously presented) The assay according to claim 2 or claim 3, wherein bacterial cell membranes provide one or more of undecaprenyl phosphate, peptidoglycan, translocase enzyme, transferase enzyme, transglycosylase enzyme, transpeptidase enzyme and lipid pyrophosphorylase enzyme.

5. (previously presented) The assay according to claim 4, wherein the bacterial cell membranes are from *Escherichia coli*.

6. (previously presented) The assay according to claim 2, wherein the reaction mixture of step (1) further comprises a test compound.

7. (previously presented) The assay according to claim 6, wherein the test compound is an antagonist of one of the enzymes.

8. (previously presented) The assay according to claim 2, wherein ethylenediaminetetraacetic acid is used as the divalent metal ion chelator compound in step (2).

9. (previously presented) The assay according to claim 2, wherein the lectin-coated beads comprise wheat germ agglutinin.